

BARNEYS CANYON MINE
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David I. Hodson
General Manager

Kennecott

November 19, 1993

Mr. D. Wayne Hedberg
Permits Supervisor
Minerals Regulatory Program
Department of Natural Resources
Division of Oil, Gas, and Mining

Dear Mr. Hedberg;


Please find the enclosed final version of the revised, updated, and consolidated mining and reclamation plan for the Barneys Canyon Mine and a response to your letter dated August 17th, 1993.

The document has had all revision text formatting and symbols removed for readability. The first volume contains the text, figures and plates while the second volume contains the combined appendices.

We are actively working on the Melco Expansion Amendment and would like to schedule a review meeting as soon as practical after the Thanksgiving holiday. A draft map showing the expanded Melco Mine and North dumps has been included for your familiarization and review.

Please let me know if you have any questions.

Sincerely,



D. I. Hodson
General Manager

enclosures

November 19, 1993

Mr. D. Wayne Hedberg
Permits Supervisor
Minerals Regulatory Program
Department of Natural Resources
Division of Oil, Gas, and Mining

Dear Mr. Hedberg;

Re: Barneys Canyon Draft Revised and Consolidated Mining and Reclamation Plan, Kennecott Corp., M/035/009, Salt Lake County, Utah

In response to your letter dated August 17, 1993 we have addressed each of the items you indicated needed to be clarified. A number of other corrections were made throughout the document (spellings, typos, extraneous words, new additions for clarification, changes to SBCS dump and impoundment references, plate references, appendix references, etc.). Because of the changes to the document, the page numbers referenced in your letter are no longer the same. Some page numbers have been shifted around by a couple of pages. Your comments are listed below with responses indicated:

1. The Table of Contents has excluded the headings for 3.0 Operational Plan (and all sections thereunder) and 4.0 Impact Assessment (and all sections thereunder).

Response: The Table of Contents has been edited to include the headings for 3.0 Operational Plan and 4.0 Impact Assessment.

2. The Table of Contents has excluded the heading for 9.0 Appendices. Also, the text refers to various Appendices, but none were included in the plan volume.

Response: The Table of Contents has been edited to include the heading for Appendices. The combined Appendices are now included in a separate binder.

3. The List of Plates needs to be corrected. Some of the titles refer to the wrong plate number. We were unable to find the Pre-Disturbance Site Map. (see marked up copy of plan).

Response: The List of Plates has been corrected and the plates appropriately numbered. The plates from the original NOI are labeled I-A through VI-A while the plates from the revision are labeled I-B through VI-B. The inadvertent omission of the Pre-Disturbance Site Map (Plate II-A) was the cause of the incorrect plate numbering in the submission.

4. Page 10, 2nd paragraph, first sentence; the access road from Hwy 48 is not shown on the referenced Plate II-A.

Response: The plate numbering scheme which was off due to a missing plate has been corrected. The reference to a plate has been stricken from the text. The Project Site Map (Plate I-A) shows highways in the area.

5. Page 12, 3rd paragraph, second sentence; the reference to Plates I-A and II-A is not clear. Please clarify.

Response: The plate numbering scheme has been corrected so the references made to the cross section lines should make sense now.

6. Page 22, 4th paragraph; we could not locate Appendix A or C in the text.

Response: The Table of Contents has been edited to include the heading for Appendices. The combined Appendices are now included a separate binder.

7. Section 3.7, Waste Disposal; needs to be updated concerning the new findings and dump re-configuration, relative to the NBCS and SBCS waste rock dump. It will no longer be blocking the drainage, and will be redesigned to lie against the south facing slope of the associated drainage. Please revise text and appropriate maps/plates to reflect this.

Response: Section 3.7 does not contain any references to the BCS dump impoundment or to the shape of the dump. The references to the BC South dump impoundment have been removed from paragraphs throughout the text. The corresponding plates have been modified for the reconfigured dump. Text has been added to section 3.7 indicating that dumps will not be designed to impound or collect water.

8. Page 45, 1st paragraph, last 2 sentences. These sentences do not make sense in context with the paragraph as a whole. Explain how dump material will reduce metal mobilization.

Response: The small percentage (4.5%) of sulfidic material will be dispersed throughout the waste dumps. Any solution coming in contact with the sulfidic material should be quickly neutralized by the surrounding 95.5% of non-sulfidic waste material. If the sulfide material was concentrated in the dump instead of being dispersed, any solution coming in contact with the material could become acidic (sulfuric acid) and begin leaching metals from material the solution might come in contact with before being neutralized. Therefore, dispersing the sulfidic material in the waste dumps should greatly reduce the potential for dissolution and mobilization of metals.

9. Page 45, 2nd paragraph; the 2 sentences conflict with page 46, 2nd paragraph, last two sentences. Divisions preference is to go with the 3 foot minimum.

Response: The paragraph on page 45 discusses the method for handling pyrite-bearing waste material at the Barneys Canyon Mine while the paragraph on page 46 discussed the method for handling sulfidic material at the Melco Mine. Pyrite-bearing waste at Barneys Canyon is mixed with non-sulfidic waste rock by end-dumping material from haul trucks. The last 2 sentences of the paragraph on page 45 were deleted from the text.

10. Page 45, 3rd paragraph, last 3 sentences. The operator should update this section regarding the deposition of the sulfide ore stockpiles.

Response: These sentences have been modified and the following text was inserted in the document. "A sulfide flotation plant has been designed to remove most of the sulfur from the sulfide ore that has been stockpiled on site and the additional sulfide ore

which will be liberated during mining. Engineering work and permitting are actively being pursued to treat this material which otherwise would have been placed in the waste dumps."

11. Page 46, last paragraph; this section needs to be updated regarding the new findings and new dump configuration for the NBCS and SBCS dump.

Response: Neither the additional work or dump reconfiguration require any changes to the text in the paragraph.

12. Page 46 & 48, define Kt. Does this mean 1,000 metric tons or 1,000 english tons? Change to 1,000 ton.

Response: All occurrences of "Kt" and "kT" have been replaced with "1000 tons".

13. Page 95, 3rd paragraph; please remove the date December 31, 1992.

Response: The date has been deleted from the text.

14. Page 67, section 3.10.3 Operational Sediment Control, 4th paragraph. This section needs to be changed, taking into account the new design for the waste rock dump from NBCS and SBCS pits.

Response: Sections of this paragraph have been modified to reflect the new dump configuration (please refer to the text on page 68).

15. Page 81, 5th paragraph. Where are Melco dumps 7140 and 7040?

Response: These dumps were artifacts from the previous NOI submission and should not have been left in the document. The reference to the 7040 dump and the 7140 dump has been removed from the text.

16. Page 82, 1st paragraph; change 30 percent to 50 percent.

Response: The survival rate of 30 percent has been changed to 50%.

17. Page 87, section 5.7 Seeding Methods, 5th paragraph; change 5.6-4 to 5.6-2.

Response: The reference to Table 5.6-4 has been changed to 5.6-2.

18. Page 91, section 6.0, Variance Requests, 2nd paragraph; please remove language discussing the BC South dump impoundment. Also, please update the language in the text to reflect that the variances have been granted for slopes, highwalls, topsoil redistribution and revegetation.

Response: The references to the BC South dump impoundment have been removed from this and other paragraphs throughout the text. The language in the text has been altered to indicate that the variances have been approved. ^ R